

Institutional electronic delivery request

Request electronic delivery of your firm's account documents, consisting of:

- Portfolio summary statements.
- Confirmations of monetary transactions and clerical changes.

Important information regarding your e-delivery election

The e-delivery election requested on this form will apply to all accounts grouped within the plan(s)/master account number(s) indicated in Section 2 below.

Your firm may only make an e-delivery election with respect to account numbers for which all accounts grouped under or within the account number have the same authorized signer requirements. Separate forms must be submitted for accounts with different signer requirements.

Notwithstanding the information your firm provides on this form, if Vanguard determines that the plan(s)/ master account(s) indicated below do not meet the foregoing requirements, or that the firm identified below is not authorized to elect e-delivery with respect to all such account(s), Vanguard may, at its sole discretion, either reject this form or apply the e-delivery election only with respect to the eligible account(s).

To elect e-delivery, your firm must have and continue to maintain at least one user registered for secure access to the firm's account information via institutional vanguard.com ("web-registered user").

| 1. Provide your firm's information | |
|---|---|
| *Name of firm | |
| *Firm's TIN | |
| *Street address or P.O. Box | |
| *Street address line 2 | |
| *City, state, zip | |
| Specify the plan(s)/account number(receive account documents via e-de | (s) corresponding to all accounts that will elivery |
| Note: If new or additional account numbers are established copy of this form in order to elect e-delivery | olished, your firm may be required to complete and submit an of for those accounts. |
| Plan/Master account number | |
| Plan/Master account name | |
| Plan/Master account number | |
| Plan/Master account name | |
| Plan/Master account number | |
| Plan/Master account name | |
| | s of your firm's web-registered user who om Vanguard when new confirmations are |
| below will be the sole recipient of such notifications. notification when new account statements are availa | ilability will be delivered to only a single user, the person listed All of your firm's web-registered users will receive email ble online and will be able to view, download, and print accoun ccordance with those users' specified access and authority. |
| *Name of recipient | *Email address |

4. Review consent agreement for electronic delivery

The terms and conditions below apply to your firm's election to receive portfolio summary statements and confirmations electronically, as described below.

Documents available electronically:

| Document type | When documents become available online | How long documents remain accessible online |
|---|---|---|
| Portfolio summary statements for mutual fund and brokerage accounts, as applicable | Within 5 business days after end of statement period | Minimum of 13 months |
| Transaction and account maintenance confirmations for mutual fund and brokerage accounts, as applicable | One business day after trading activity or account change | Minimum of 13 months |

Vanguard reserves the right to modify without prior notice the length of time during which documents remain available online. Regardless of your e-delivery selections, certain documents may continue to be sent by U.S. mail for compliance, business, or security reasons.

How your firm's consent is applied, and how long it lasts

- Your firm's consent applies to all eligible accounts within all eligible account number(s) specified in Section 2.
- Your firm's consent to e-delivery is effective until it is revoked by giving telephone or email notice to Vanguard or until it is deemed revoked, as provided herein. Your firm always has the ability to change delivery preferences at any time by contacting Vanguard at 800-998-2471 or by sending an email notice to your designated relationship manager or client service analyst.
- In the event Vanguard materially amends this consent agreement, your firm will be provided notice and will have the
 opportunity to revoke consent or change delivery elections.

How your firm will be notified when documents are available online

Portfolio summary statements—All web-registered users will receive email notification, to their firm email addresses on file with Vanguard, when a portfolio summary statement becomes available. Each web-registered user can access the statement securely by logging on to institutional.vanguard.com, then:

- Selecting My Accounts, then
- Selecting Statements, where the statements can be downloaded, printed, or saved to a hard drive.

Confirmations—A single web-registered user, identified in Section 3, will receive an email notification, to their firm email addresses on file with Vanguard, when a confirmation eligible for e-delivery becomes available. Each web-registered user can access the confirmation securely by logging on to institutional.vanguard.com, then:

- · Selecting My Accounts, then
- Selecting Statements, then
- Selecting Confirmations, where the confirmations can be downloaded, printed, or saved to a hard drive.

Your firm can contact Vanguard at any time to request a paper copy of any account document at no cost. Your firm may want to consider downloading, saving, and/or printing the materials, in case a document is no longer available online or our website becomes temporarily unavailable.

Required software

- Documents available via e-delivery are available only in portable document format (PDF). Web-registered users must have PDF-viewing software, such as Adobe Reader, version 7.0 or higher, installed on their computers in order to access, view, and print PDF files. Adobe Reader can be downloaded at no cost from Adobe's website (www.adobe.com).
- If your firm or its web-registered users do not have Adobe Reader or are otherwise unable to view or print account documents on Vanguard's website, do not submit this form.

How your firm can change its information

- To change or verify your firm's mailing preferences, or to revoke your firm's e-delivery election, contact your relationship manager or client service analyst at Vanguard. Requested changes or revocation will be processed by Vanguard as soon as administratively feasible.
- To make any changes with respect to your firm's web-registered users, including adding or removing users or updating such users' firm email addresses or other information, complete a new copy of Vanguard's Institutional Investors Web Registration and Change Form and submit the updated form to Vanguard. This form can be obtained on institutional. vanguard.com under Forms.

Other information, terms, and conditions

- Email notifications may be sent from one of the following domains: vanguard.com or evanguard.com. If your firm uses spam-blocking software, your firm's web-registered users should update their settings to allow email from these domains. Email notifications may also be sent via email directly from a member of your Vanguard service team.
- On rare occasions, emails may not transmit properly, your firm's internet service provider may experience system failure, or other problems may arise. It is your firm's responsibility to notify Vanguard immediately of any such issues and, where necessary, to request a free paper copy of any affected documents.
- If your firm's web-registered users do not receive an anticipated email notification, they should log on to institutional. vanguard.com for up-to-date documents and information about your firm's accounts. If your firm's web-registered users are unable to download, view, and print any materials, they should contact Vanguard at 800-998-2471 for assistance or to request a free paper copy of the relevant documents.
- If an email to any designated web-registered user is returned to Vanguard as undeliverable, we will contact your firm in an attempt to ascertain the correct email address for the user. Your firm agrees that, if it is necessary to update such web-registered user's email address, it will promptly do so by completing and submitting Vanguard's Institutional Investors Web Registration and Change Form. If a subsequent email notification to the same web-registered user is returned to Vanguard as undeliverable, Vanguard will have the right, at its sole discretion, to discontinue such user's access to Vanguard's institutional website by deactivating the applicable user name. Vanguard may reinstate such user's access at any such time that such user's information is appropriately updated by your firm via Vanguard's Institutional Investors Web Registration and Change Form.
- Vanguard will inform your firm promptly if we are unsuccessful in our attempt to notify (i) the user designated in Section 3 that a confirmation is available online, or (ii) at least one web-registered user that a portfolio summary statement is available online, using the email addresses your firm has provided us with respect to such web-registered user(s). If Vanguard has informed your firm of any such unsuccessful delivery and your firm promptly makes updates, via Vanguard's Institutional Investors Web Registration and Change Form, to the information pertaining to its web-registered users sufficient to permit Vanguard to successfully deliver emails to the designated user, in the case of confirmation availability emails, or to at least one such user, in the case of portfolio summary statement availability emails, Vanguard will continue e-delivery of such account documents as authorized in this form. If your firm fails to make such updates in a timely manner, Vanguard will deem your firm's consent to e-delivery revoked as to confirmations and/or portfolio summary statements (as the case may be), suspend e-delivery of your firm's confirmations and/or portfolio summary statements, and begin sending such documents via U.S. mail.

Authorization and signatures

Please review the following carefully and provide the proper signature(s) below.

- This form must be signed by an authorized signatory or signatories for your firm, as identified in an Organization Resolution on file with Vanguard or in a copy of your firm's Corporate Resolution dated within one year of this request. To verify that your firm has a current Organization Resolution on file with Vanguard, please contact us.
- The undersigned, on behalf of the firm identified herein (referred to as "your firm"), authorize Vanguard to deliver your firm's portfolio summary statements and account confirmations electronically, on the terms and conditions set forth in this form.

- Your firm hereby consents to e-delivery of such account documents and acknowledges and agrees that, for all eligible account number(s) specified above, Vanguard will not deliver such account documents via U.S. mail (except when your firm requests a free paper copy). Your firm acknowledges and agrees that this consent will be effective until it is revoked by notice to Vanguard or deemed revoked, as provided herein.
- Your firm hereby agrees and certifies that its web-registered users are its authorized representatives to receive account
 documents for all accounts within the account number(s) identified above, and that all such users will access account
 documents on behalf of your firm upon receipt of email notifications from Vanguard regarding the availability of such
 documents.
- Your firm hereby certifies that the information on file with Vanguard regarding your firm's web-registered users, including email addresses, is current and accurate at the time of submission of this form.
- Your firm hereby warrants that it will maintain current information with Vanguard, including email addresses, for its webregistered users, and will immediately notify Vanguard, by completing and submitting Vanguard's Institutional Investors
 Web Registration and Change Form, of any changes to, or the need to update, any such information, including the need to
 add or remove any web-registered users.
- Your firm hereby certifies that the authorization to Vanguard under this form to send email correspondence to any specified
 representative of your firm is the result of a request by or agreement of the recipient representative to receive such email
 correspondence.
- Your firm hereby acknowledges and agrees that the elections made hereunder will apply to any eligible new accounts that are opened in or moved into any plan/master account number covered by this request, and that Vanguard will not permit any new accounts to be opened in, or moved into, any such plan/master account number after the time that Vanguard affects your firm's elections hereunder, unless such new account is registered in the name of your firm, under your firm's taxpayer identification number. Your firm acknowledges and agrees that if any such account that does not meet the foregoing requirements is opened in or moved into any such plan/master account number, Vanguard will be authorized to move such account into a separate plan/master account number.
- Your firm hereby agrees to indemnify, defend, and hold Vanguard harmless from and against any losses it—or its clients—suffers (including attorneys' fees) as a result of any failure on the part of your firm's web-registered users to access your firm's account documents electronically when available, your firm's failure to request a free paper copy of any account documents that are not available or deliverable electronically for any reason, or your firm's failure to notify Vanguard in writing of any changes to the information on file with Vanguard regarding your firm's web-registered users, including, without limitation, email addresses.
- · Your firm hereby acknowledges and agrees to all other terms and conditions set forth herein pertaining to e-delivery.

| *Name of firm (must match firm identified above) | |
|--|--------------------|
| *Name of authorized signatory (type or print) | |
| *Signature of authorized signatory | *Date (mm/dd/yyyy) |
| Phone number of authorized signatory | |

If second authorized signatory is required:

| *Name of authorized signatory (type or print) | |
|---|--------------------|
| *Signature of authorized signatory | *Date (mm/dd/yyyy) |
| Phone number of authorized signatory | |

Mailing and fax information

Return your completed form and any attached information by mail to:



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^{*}Required information